

AMENDMENTS TO THE SPECIFICATION

On page 2, please replace the paragraph beginning in line 7 with the following paragraph.

--For example, such a microreactor comprises a first substrate on which ~~a~~ an injection port, a discharge port and a channel(s) for connecting these ports are formed, and a transparent substrate which is laminated and joined on the first substrate so as to seal the injection port, the discharge port and the channel formed on the first substrate, wherein a reagent is supplied to the injection port through a through hole for injecting a reagent, the supplied reagent passes through the channel which is a reaction path, and is finally, discharged through a through hole for discharging a reagent which is formed in the discharge port.--

On page 4, please replace the paragraph beginning in line 4 with the following paragraph.

--A method for joining a joined material having a hydroxyl group containing surface to a joining material having an ~~organosiloxay~~ organosiloxy group containing surface, wherein the ~~organosiloxay~~ organosiloxy group containing surface is irradiated by ultraviolet radiation having wavelength of less than 220 nm thereby carrying out an oxidization treatment, and the hydroxyl group containing surface is adhered to the oxidized ~~organosiloxay~~ organosiloxy group containing surface.--

On page 4, please replace the paragraph beginning in line 13 with the following paragraph.

--The ~~organosiloxay~~ organosiloxy group containing surface may be formed by a surface altering treatment using hexamethyldisilazane.--

On page 4, please replace the paragraph beginning in line 16 with the following paragraph.

--According to the joining method of this invention, an oxidation treatment to a hydrophobic surface is carried out by irradiating ultraviolet radiation with specific wavelength on the hydrophobic surface of a junction base material, on which the ~~organosiloxay~~ organosiloxy group exists.--

On page 6, please replace the paragraph beginning in line 12 with the following paragraph.

--A joining method according to the present invention is a method for joining two members, and especially, a method for joining a surface of joining material which contains a hydroxyl group (hereinafter referred to as a "hydrophilic surface" to a surface of the joining base material which contains an ~~organosiloxay~~ organosiloxy (group) (hereinafter referred to as "a hydrophobic surface"). In the method, the hydrophobic surface of the joining base material is irradiated by ultraviolet ray of less than 220 nm wavelength thereby carrying out oxidation treatment, and then the hydrophilic surface of the joined material is made in close contact with the surface on which the oxidation treatment is carried out.--

On page 7, please replace the paragraph beginning in line 21 with the following paragraph.

--As shown in Fig. 1, the polysiloxane substrate 10 has the hydrophobic surface (on an upper surface in Fig. 1) in the state where the ~~organosiloxay~~ organosiloxy (group) exists, and as shown in Fig. 3, the glass substrate 20 has the hydrophilic surface (on the undersurface shown in Fig. 3) in the state where the hydroxyl group exists.--

On page 8, please replace the paragraph beginning in line 17 with the following paragraph.

--When the active oxygen contacts the surface 11 of the polysiloxane substrate 10, the surface 11 is oxidized so that methyl group related to the ~~organosiloxay~~ organosiloxy (group) is desorbed on the surface 11, and the silicon atom to which the methyl group was joined is joined with the active oxygen.--

On page 13, please replace the paragraph beginning in line 20 with the following paragraph.

--For example, in the joining method, as the joining material, a substrate may be prepared by exposing a surface (such as an upper surface shown in Fig. 6) of silicon atom containing material 31 made of material containing silicon such as silicon wafer, to vapor of hexamethyldisilazane (HMDS) expressed in Formula (2) thereby altering a state of the surface

so that the ~~organosiloxay~~ organosiloxy (group) as shown in Fig. 7 exists in order to form a hydrophobic surface.--

On page 14, please replace the paragraph beginning in line 8 with the following paragraph.

--Even where the substrate 30 having the surface 32 on which the surface alternating treatment is performed by hexamethyldisilazane is used as a joining base material, in the atmosphere containing oxygen or ozone, the methyl group concerning an ~~organosiloxay~~ organosiloxy group as shown in Fig. 8 is ~~disorped~~ desorbed so that active oxygen is combined with the silicon atom with which the methyl group was combined, by irradiating ultraviolet radiation with a wavelength of 220 nm or less to the surface 32 which is the hydrophobic surface thereby carrying out oxidation treatment.--

On page 16, please replace the paragraph beginning in line 11 with the following paragraph.

--According to the joining method of the present invention, the oxidation treatment of the hydrophobic surface is carried out by irradiating the ultraviolet radiation having a specific wavelength on the hydrophobic surface on which the ~~organosiloxay~~ organosiloxy group in a junction base material exists, and the adhering process is carried out by adhering the hydrophilic surface of the jointing material, where the hydroxyl group exists, to the oxidized surface, thereby joining the surface of the joining base material and the surface of the joined material by the action of chemical bond whose bond energy is large, so that it is possible to join them easily and firmly without a large and expensive apparatus.--

On page 17, please replace the paragraph beginning in line 6 with the following paragraph.

--Although only some exemplary embodiments of this invention have been described in detail above, those skilled in the art will readily ~~appreciated~~ appreciate that many modifications are possible in the exemplary embodiments without materially departing from the novel teachings and advantages of this invention. Accordingly, all such modifications are intended to be included within the scope of this invention.--